

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-1123; Product Identifier 2017-SW-013-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2017-02-07 for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 C-2 and Model MBB-BK 117 D-2 helicopters. AD 2017-02-07 currently requires a repetitive inspection and a one-time torque of each hydraulic module plate assembly attachment point (attachment point). Since we issued AD 2017-02-07, a terminating action has been developed to address the unsafe condition. This proposed AD would retain the initial inspection and torque requirements of AD 2017-02-07 and require replacing the attachment point hardware. The actions of this proposed AD are intended to prevent an unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 days AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

• <u>Federal eRulemaking Docket</u>: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.

- <u>Fax</u>: 202-493-2251.
- <u>Mail</u>: Send comments to the U.S. Department of Transportation, Docket
 Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
 Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
 Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-1123; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Aviation Safety Agency (EASA) AD, the economic evaluation, any comments received and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Airbus

Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000

or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub.

You may review service information at the FAA, Office of the Regional Counsel,

Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, Senior Aviation Safety

Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101

Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

We issued AD 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017) (2017-02-07) for Airbus Helicopters Model MBB-BK 117 C-2 helicopters, serial numbers up to and including 9750, and Model MBB-BK 117 D-2 helicopters, serial numbers up to and including 20110, with a hydraulic module plate assembly part number

B291M0003103 with a single locking attachment point installed. AD 2017-02-07 requires a repetitive inspection and a one-time torque of the attachment points. The actions in AD 2017-02-07 are intended to prevent failure of an attachment point, loss of the hydraulic module plate, and subsequent loss of control of the helicopter.

EASA, which is the Technical Agent for the Member States of the European Union, issued EASA AD No. 2015-0210R1, Revision 1, dated October 28, 2015 (2015-0210R1), to correct an unsafe condition for Airbus Helicopters Model MBB-BK117 C-2, MBB-BK117 C-2e, MBB-BK117 D-2, and MBB-BK117 D-2m helicopters. EASA advised that the hydraulic plate assembly on certain MBB-BK117 models has four attachment points on the fuselage secured by a single locking mechanism. According to EASA, a design reassessment revealed stiffness of the hydraulic plate may be insufficient to withstand the in-service loads in the event one of the four single locking attachment points fails. EASA stated that if this condition is not detected and corrected, it may lead to loss of the hydraulic module plate and possible loss of control of the helicopter.

Therefore, the EASA AD required a repetitive inspection and one-time torque tightening of the attachment points in accordance with Airbus Helicopters' service information.

EASA considered its AD an interim action and stated further AD action may follow. EASA subsequently revised AD 2015-0210R1 and issued AD No. 2015-0210R2, dated December 2, 2016 (2015-0210R2), to exclude from the applicability helicopters with an improved double locking attachment mechanism that is not subject to the unsafe condition.

Actions Since AD 2017-02-07 Was Issued

Since we issued AD 2017-02-07, Airbus Helicopters revised its service information to add procedures to modify single locking attachment mechanisms to double locking attachment mechanisms. EASA subsequently superseded AD 2015-0210R2 with AD No. 2017-0047, dated March 13, 2017, to require installation of double locking attachments.

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

Related Service Information Under 1 CFR part 51

We reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 for Model MBB-BK 117 C-2 helicopters and ASB No. ASB MBB-BK117 D-2-29A-001 for Model MBB-BK 117 D-2 helicopters, both Revision 2 and both dated February 1, 2017. Until the attachment points are modified with double locking attachment mechanisms, this service information specifies a repetitive visual inspection for condition and correct installation of the attachment points and replacing the affected parts if there is a crack. This service information also specifies a tightening torque check after the initial inspection and replacing the affected parts if torque cannot be applied. This revision of the service information also specifies procedures to replace the single

locking attachment hardware with double locking attachment hardware.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

We also reviewed Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 for Model MBB-BK 117 C-2 helicopters and ASB No. ASB MBB-BK117 D-2-29A-001 for Model MBB-BK 117 D-2 helicopters, both Revision 1 and both dated October 14, 2016. Revision 1 of this service information contains the same visual inspection and torque tightening check procedures as Revision 2. However, Revision 2 of this service information adds the procedures to replace the single locking attachment hardware with double locking attachment hardware.

Proposed AD Requirements

This proposed AD would require, within 100 hours time-in-service (TIS), unless already done within the last 100 hours TIS, performing a visual inspection of each attachment point of the hydraulic module plate assembly for a crack and proper installation, and applying torque to the nuts of each attachment point. This proposed AD would also require, within 300 hours TIS, replacing each single locking attachment point mechanism with a double locking attachment point mechanism.

Differences Between this Proposed AD and the EASA AD

The EASA AD specifies performing the visual inspection of each attachment point at intervals not exceeding 400 flight hours. This proposed AD would not require a repetitive inspection. This proposed AD would require the replacement of each single

locking attachment point mechanism with a double locking attachment point mechanism within 300 hours TIS instead, which would make subsequent inspections unnecessary.

Costs of Compliance

We estimate that this proposed AD would affect 134 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. We estimate the cost of labor at \$85 per work-hour. Visually inspecting the four attachment points would take about 0.75 work-hour for an estimated cost of \$64 per helicopter and \$8,576 for the U.S. fleet. Inspecting the torque of the four attachment points would take about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$2,814 for the U.S. fleet. Replacing any of the attachment point parts would take a minimal amount of time and parts would cost about \$48 per attachment point. Installing four double locking attachment point mechanisms would take a minimal amount of time and parts would cost about \$400 per helicopter and \$53,600 for the U.S. fleet.

According to Airbus Helicopters service information, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Airbus Helicopters.

Accordingly, we have included all costs in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017), and adding the following new AD:

Airbus Helicopters Deutschland GmbH: Docket No. FAA-2017-1123; Product Identifier 2017-SW-013-AD.

(a) Applicability

This AD applies to Model MBB-BK 117 C-2 helicopters, serial numbers up to and including 9750, and Model MBB-BK 117 D-2 helicopters, serial numbers up to and including 20110, with a hydraulic module plate assembly part number B291M0003103 with a single locking attachment point installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as failure of a hydraulic module plate assembly attachment point (attachment point). This condition could result in loss of the hydraulic module plate and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017).

(d) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

- (1) Within 100 hours time-in-service (TIS):
- (i) Visually inspect the split pins, castellated nuts, plugs, nuts, and hexagon bolts of each attachment point for a crack and for proper installation by following the Accomplishment Instructions, paragraphs 3.B.1.3.a. through 3.B.1.3.d., of Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 (ASB MBB-BK117 C-2-29A-003) or Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001 (ASB MBB-BK117 D-2-29A-001), both Revision 2 and both dated February 1, 2017, as applicable to your model helicopter. Replace any part that has a crack before further flight. If the split pins, castellated nuts, or hexagon bolts are not as depicted in Figure 2 of ASB MBB-BK117 C-2-29A-003 or ASB MBB-BK117 D-2-29A-001, before further flight, properly install them.

- (ii) Apply a torque of 9 to 10 Nm to the left-hand and right-hand nuts of each attachment point. If a torque of 9 to 10 Nm cannot be applied, replace the affected nut before further flight.
 - (2) Within 300 hours TIS:
- (i) Replace each forward single locking attachment hardware with double locking attachment hardware by following the Accomplishment Instructions, paragraphs 3.B.3.3. through 3.B.3.6. on page 11 of ASB MBB-BK117 C-2-29A-003 or ASB MBB-BK117 D-2-29A-001, as applicable to your model helicopter, except you are not required to discard old parts.
- (ii) Replace each aft single locking attachment hardware with double locking attachment hardware by following the Accomplishment Instructions, paragraphs 3.B.3.1. through 3.B.3.3. on page 13 of ASB MBB-BK117 C-2-29A-003 or ASB MBB-BK117 D-2-29A-001, as applicable to your model helicopter, except you are not required to discard old parts.

(g) Credit for Previous Actions

Actions accomplished before the effective date of this AD in accordance with the procedures specified in AD 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017) or Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 or ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 1 and both dated October 14, 2016, are considered acceptable for compliance with the corresponding actions specified in paragraph (f)(1) of this AD.

(h) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Safety Management Section, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(i) Additional Information

- (1) Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 and ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 1 and both dated October 14, 2016, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.
- (2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2017-0047, dated March 13, 2017. You may view the EASA AD on the Internet at http://www.regulations.gov in the AD Docket.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 2900, Hydraulic Power System.

Issued in Fort Worth, Texas, on November 17, 2017.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

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